

WHAT IS CLAIMED IS:

1. A liquid crystal display device, comprising:
a liquid crystal cell including a liquid crystal layer held between an upper substrate and a lower substrate that oppose each other, and a semi-transparent reflective layer provided on an inner side of the lower substrate, the inner side being adjacent to the liquid crystal layer;
a first elliptically polarizing plate to cause elliptically polarized light to enter the liquid crystal layer through the upper substrate; and
a second elliptically polarizing plate to cause elliptically polarized light to enter the liquid crystal layer through the lower substrate, each of the first elliptically polarizing plate and the second elliptically polarizing plate having a liquid crystal film fixed in hybrid alignment.
2. The liquid crystal display device according to claim 1, each of the first elliptically polarizing plate and the second elliptically polarizing plate including a polarizer for transmitting linearly polarized light, at least one liquid crystal film fixed in nematic hybrid alignment, and at least one stretched film.
3. The liquid crystal display device according to claim 2, angles formed between phase-retarding axes of the liquid crystal films fixed in nematic hybrid alignment in the first elliptically polarizing plate and the second elliptically polarizing plate and an axis including the distinct viewing direction of the liquid crystal layer, being within a range from plus 30 degrees to minus 30 degrees.
4. The liquid crystal display device according to claim 3, phase differences in plane of the liquid crystal films fixed in nematic hybrid alignment in the first elliptically polarizing plate and the second elliptically polarizing plate being within a range from 90 nm to 140 nm.
5. The liquid crystal display device according to claim 1, each of the first elliptically polarizing plate and the second elliptically polarizing plate including the polarizing plate, at least one liquid crystal film fixed in discotic hybrid alignment, and at least one stretched film.
6. The liquid crystal display device according to claim 5, angles formed between phase-advancing axes of the liquid crystal films fixed in discotic hybrid alignment in the first elliptically polarizing plate and the second elliptically polarizing plate and an axis including the distinct viewing direction of the liquid crystal layer, being within a range from plus 30 degrees to minus 30 degrees.

7. The liquid crystal display device according to claim 1, the first elliptically polarizing plate including a polarizer, at least one liquid crystal film fixed in nematic hybrid alignment, and at least one stretched film, and the second elliptically polarizing plate including a polarizer, at least one liquid crystal film fixed in discotic hybrid alignment, and at least one stretched film.

8. The liquid crystal display device according to claim 7, an angle formed between a phase-retarding axis of the liquid crystal film fixed in nematic hybrid alignment in the first elliptically polarizing plate and an axis including the distinct viewing direction of the liquid crystal layer, and an angle formed between a phase-advancing axis of the liquid crystal film fixed in discotic hybrid alignment in the second elliptically polarizing plate and the axis including the distinct viewing direction of the liquid crystal layer, being within a range from plus 30 degrees to minus 30 degrees.

9. The liquid crystal display device according to claim 8, phase differences in plane of the liquid crystal film fixed in nematic hybrid alignment in the first elliptically polarizing plate being within a range from 90 nm to 140 nm.

10. The liquid crystal display device according to claim 1, the first elliptically polarizing plate including the polarizing plate, at least one liquid crystal film fixed in discotic hybrid alignment, and at least one stretched film, and the second elliptically polarizing plate including the polarizing plate, at least one liquid crystal film fixed in nematic hybrid alignment, and at least one stretched film.

11. The liquid crystal display device according to claim 10, an angle formed between a phase-advancing axis of the liquid crystal film fixed in discotic hybrid alignment in the first elliptically polarizing plate and an axis including the distinct viewing direction of the liquid crystal layer, and an angle formed between a phase-retarding axis of the liquid crystal film fixed in nematic hybrid alignment in the second elliptically polarizing plate, and the axis including the distinct viewing direction of the liquid crystal layer, being within a range from plus 30 degrees to minus 30 degrees.

12. The liquid crystal display device according to claim 11, phase difference in plane of the liquid crystal film fixed in nematic hybrid alignment in the second elliptically polarizing plate being within a range from 90 nm to 140 nm.

13. The liquid crystal display device according to claim 4, the liquid crystal cell having a layer-thickness adjusting layer that makes the thickness of the liquid crystal layer smaller in a reflective display region than in a transmissive display region.

14. The liquid crystal display device according to claim 13, the liquid crystal layer adopting a twisted nematic mode.
15. The liquid crystal display device according to claim 13, the liquid crystal layer adopting parallel alignment, and the twist angle therein being zero degrees.
16. An electronic apparatus, comprising:
the liquid crystal display device according to claim 1.